Air Pollution Control
Title V Permit to Operate
Statement of Basis for Draft Title V Permit, No. V-SU-0045-06.02
February 2009

Red Cedar Gathering Company Spring Creek Compressor Station Southern Ute Reservation La Plata County, Colorado

# 1. Description of Significant Permit Modification #2

The Spring Creek Compressor Station is a natural gas compression facility owned and operated by Red Cedar Gathering Company (Red Cedar). The facility is located within the exterior boundaries of the Southern Ute Indian Reservation in Southwestern Colorado.

The facility is currently permitted as a major source of carbon monoxide (CO) and a synthetic minor source of hazardous air pollutants (HAPs). The initial part 71 operating permit, #V-SU-0045-06.00, was issued on April 17, 2007 and was administratively amended on August 17, 2007 (#V-SU-0045-06.01). Permitted emission units at the facility include five Caterpillar 3516LE 4-stroke lean burn (4SLB) natural gas-fired reciprocating internal combustion engines (RICE) used to compress incoming natural gas (units C-201, C-202, C-203, C-204, and C-205). Other permitted emission sources at Spring Creek Compressor Station are insignificant, including two natural gas fired glycol dehydrators. The facility has no storage tanks with the potential for flash emissions, and does not remove carbon dioxide, extract natural gas liquids (NGLs) from field gas, or fractionate mixed NGL to natural gas products. The facility is an area source of HAPs due to voluntary formaldehyde (CH<sub>2</sub>O) emission limits on compressor engine units C-201, C-202, and C-203.

## a. Requested permit modifications

On December 12, 2007, Red Cedar requested that the part 71 operating permit be cancelled, because units C-204 and C-205 would be permanently removed from the facility, reducing uncontrolled emissions of criteria pollutants and HAPs below title V thresholds. On August 13, 2008, Red Cedar rescinded their request for a permit cancellation. Units C-204 and C-205 had been removed; however Red Cedar's business plan had changed to include reinstalling additional units at the Spring Creek Compressor Station in place of the two removed units.

On October 15, 2008 the U.S. Environmental Protection Agency, Region 8 (EPA) received an application from Red Cedar proposing a significant modification to the Spring Creek Compressor Station. Red Cedar requested to have the voluntary formaldehyde emission limits for units C-201, C-202, and C-203 referenced in Section II removed from the permit and replaced with the standard requirements under 40 CFR part 63 subpart ZZZZ, also known as the Maximum Achievable Control Technology (MACT) for RICE (RICE MACT), as applicable. Results from the September 2008 stack tests, indicated that units C-201, C-202, and C-203 achieved compliance with the 93 percent CO reduction required by the RICE MACT, as well as the 0.05 lbs/hr CH<sub>2</sub>O emission limit in the current permit. Although the previously requested and permitted 0.05 lbs/hr CH<sub>2</sub>O limits were based on the manufacturer's specifications of 93 percent CH<sub>2</sub>O reduction, after further research, Red Cedar believes that the requested limits are unrealistic to achieve continuously. Red Cedar believes that they would be able to continuously meet the CO reduction requirements of the RICE MACT.

Without the permitted synthetic minor formaldehyde limits on the engines, the source is considered to have become a major source of HAPs upon installation of units C-204 and C-205 in December 2005, based on uncontrolled potential emissions from the engines. Units C-204 and C-205 were considered existing units under the RICE MACT, because they commenced construction before December 19, 2002; therefore, they were not subject to the RICE MACT requirements. Units C-201, C-202, and C-203 commenced construction after December 19, 2002; therefore, they are subject to the RICE MACT requirements. Based on the date the source became major for HAPs, the units must have been in compliance with the RICE MACT by December 2008. The results of the September 2008 annual performance tests indicate that the engines achieved compliance within the three years required by the RICE MACT. See Section 3.a. of this Statement of Basis for discussions of applicability to the RICE MACT and the New Source Performance Standards (NSPS) for spark ignition internal combustion engines (SI ICE) at 40 CFR part 60, subpart JJJJ (NSPS JJJJ).

Red Cedar is in the process of replacing units C-204 and C-205 under the off permit changes provisions of the current permit. Red Cedar anticipates that these replacement units will be equipped with an oxidation catalyst device to reduce CO,  $CH_2O$ , and VOC emissions, but that they will not be subject to the RICE MACT or NSPS JJJJ based on the commenced construction and manufacture dates, respectively. Red Cedar is not requesting that the controls on units C-204 and C-205 be made federally enforceable.

Additionally, Red Cedar has replaced glycol dehydration unit X-302 with unit X-303 via the off permit changes provisions of the current permit. In its application, Red Cedar moved units X-303 (formerly X-302) and X-301 from the significant emission unit list to the insignificant emission unit (IEU) list, based on updated GLYCalc version 4.0 emissions estimates for the two units (less than 2 tpy VOC emissions).

Red Cedar also requested a waiver of the on-site record keeping requirements in 40 CFR 63.10(b)(1) & (3) and §63.6660(c), similar to a request previously approved by EPA Region 8's

Air Toxics and Technical Enforcement Program for all of Red Cedar's other unmanned part 71 sources. Red Cedar is proposing to keep all records for the Spring Creek Compressor Station at the Corporate Headquarters in Durango, Colorado. EPA approved Red Cedar's request for the recordkeeping waiver in a letter dated January 12, 2009. The language in Sections II.M.6., III.A.1., and IV.Q. has been revised in the draft permit to reflect the waiver approval.

# b. <u>EPA-initialed permit modifications</u>

In addition to the modifications requested above, EPA sent a letter on November 8, 2007, to inform Red Cedar of a new mailing address, effective December 17, 2007, for the submittal of annual fee payments required pursuant to 40 CFR Part 71 and the title V permits issued by EPA's Air Program. EPA has amended the permit to correct the fee payment address. The new addresses are:

## For regular U.S. Postal Service mail

U.S. Environmental Protection Agency FOIA and Miscellaneous Payments Cincinnati Finance Center P.O. Box 979078 St. Louis, MO 63197-9000

# For non-U.S. Postal Service Express mail

(FedEx, Airborne, DHL, and UPS) U.S. Bank Government Lockbox 979078 U.S. EPA FOIA & Misc. Payments 1005 Convention Plaza SL-MO-C2-GL St. Louis, MO 63101

EPA also received an administrative amendment request for a change to the plant mailing address on February 14, 2008. The new plant mailing address is:

Red Cedar Gathering Company 125 Mercado Street, Suite 201 Durango, Colorado 81301

As a result of new rules promulgated at 40 CFR parts 60 and 63, EPA has added clarification text to renumbered Sections III.C. Alternative Operating Scenarios and IV.Q. Off Permit Changes. The revised text clarifies when the Alternative Operating Scenarios and Off Permit Changes provisions can be utilized and clarifies the notification requirements when an off permit change is made.

As explained in Section 4.0 of this Statement of Basis (Analysis of Applicable Requirements), the Spring Creek Compressor Station is considered an area source according to 40 CFR part 63, subpart HH – the NESHAPs for Oil and Natural Gas Production Facilities. Certain area sources whose uncontrolled benzene emissions from glycol dehydrators are determined to be less than 1 tpy are exempt from the general requirements of the rule; however, they are required to retain GRI-GLYCalc determinations used to demonstrate that actual average benzene emissions are below 1 tpy. Upon review of the active permit

(#V-SU-0045-06.01), EPA noted that the permit does not contain this new area source requirement; therefore, EPA has added this requirement to Section III.A (General Recordkeeping Requirements) of the draft permit.

Additionally, in an effort to streamline the title V permits and reduce the number of administrative permit amendments requested, EPA has removed specific non-enforceable facility information, such as the names and phone numbers of the Responsible Official, Facility Contact, and Tribal Contact, as well as the plant mailing address. Part 71 does not require this information to be in the permit and changes to such information are the most often requested administrative permit amendments. This information will be maintained in the Statements of Basis for each permit action.

EPA requests from this point forward that Red Cedar continue to notify EPA in writing of changes to such facility information; however, the changes will no longer require administrative permit amendments. The notifications will be kept on file, similar to off permit change notifications, and the most current information will be updated in the Statement of Basis as part of the next permit modification or renewal.

EPA also reviewed the records of off permit change notifications for the facility and has updated Table 1- Emission Units in the permit with the most current information for emission units that have been replaced or overhauled.

The following modifications have been made to this permit:

- Permit number and issue/effective/expiration dates removed from signature cover page.
- Permit issuance cover page created to follow signature cover page (includes information removed from signature cover page).

### • Section I.A. Source Information

1. Removed names and phone numbers for the Responsible Official, Alternate Responsible Official, Company Contact and Tribal Contact, and the Parent Company Mailing Address.

### • Section I.B. Source Emission Points

- 1. Table 1 Emissions Units Serial numbers for emission units were updated based on Off Permit Change notifications and Red Cedar's Significant Modification application. Dehydration Units X-301 and X-303 (formerly X-302) were removed.
- 2. Table 2 Insignificant Emission Units Updated list of IEUs, per Red Cedar's Significant Modification application and subsequent correspondence. Dehydration units X-301 and X-303 (formerly X-302) were added.

# • Section II – Specific Requirements for C-201, C-202, and C-203:

1. Replaced voluntary synthetic minor CH<sub>2</sub>O emission limits and associated monitoring, reporting, and recordkeeping requirements with RICE MACT requirements for major sources, found at 40 CFR part 63, subpart ZZZZ.

# • Section III - Facility-Wide Requirements

- 1. Revised location of required recordkeeping to reflect EPA-approved request for waiver of on-site recordkeeping.
- 2. Pursuant to 40 CFR 63.774(d)(1) a GRI-GLYCalc recordkeeping requirement was added at Section III.A for IEU glycol dehydration units X-301 and X-303.
- 3. Incorporated new alternative operating scenario language at Section III.C., developed to disallow engine replacements should the requirements promulgated at 40 CFR 63, subpart ZZZZ and/or the New Source Performance Standards promulgated at 40 CFR 60, subpart JJJJ be triggered.

# • Section IV - Part 71 Administrative Requirements

- 1. Bank name and address for submittal of annual fee payments was changed at Section IV.A. Annual Fee Payment.
- 2. Updated the Off Permit provisions at IV.Q. to account for major source requirements at 40 CFR 63, subpart ZZZZ and the New Source Performance Standards promulgated at 40 CFR 60, subpart JJJJ for new, reconstructed or modified engines; revised location of required recordkeeping to reflect EPA-approved request for waiver of on-site recordkeeping.

# • Section V - Appendix.

1. Permit revision history was changed and has been removed from the Appendix and moved to the permit issuance cover page at the front of the permit.

EPA has proposed these permit modifications pursuant to 40 CFR 71.7(e)(3) and in accordance with the Significant Permit Modification requirements in Section IV.K. of the draft permit. The remainder of this draft Statement of Basis outlines general information about the Spring Creek Compressor Station and the basis for the terms and conditions of the draft modified permit.

# 2. Facility Information

### a. Location

The Spring Creek Compressor Station, owned and operated by Red Cedar Gathering Company ("Red Cedar"), is located within the exterior boundaries of the Southern Ute Indian Reservation, in the southwestern part of the State of Colorado. The exact location is Section 31, T33N, R6W, in La Plata County, Colorado. The mailing address is:

Red Cedar Gathering Company 125 Mercado Street, Suite 201 Durango, CO 81301

### b. Contacts

### **Responsible Offical:**

Albert J. Brown, President-COO 125 Mercado Street, Suite 201 Durango, CO 81301 Main Office: (970) 764-6900

Fax: (970) 382-0462

### **Facility contact:**

Ethan Hinkley, Environmental Compliance Specialist- Air Quality Red Cedar Gathering Company 125 Mercado Street, Suite 201 Durango, CO 81301

Main Office: (970) 764-6900 Direct Line: (970) 764-6910

### **The Tribal Contact:**

James Temte Air Program Manager - Southern Ute Indian Tribe (970) 563-4705

# c. <u>Description of operations</u>

The Spring Creek Compressor Station, owned and operated by Red Cedar, currently dehydrates and compresses coalbed methane gas. The gas comes from the Fruitland Coal Formation.

The Spring Creek Compressor Station is a major source for CO and CH<sub>2</sub>O with respect to the part 71 operating permit requirements.

### d. List of all units and emission-generating activities

In the part 71 operating permit significant modification application for Spring Creek Compressor Station, Red Cedar provided the information shown in Tables 1 and 2 below. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as "insignificant" emitting units (IEUs) are listed separately in Table 2.

Table 1 - Emission Units Red Cedar Gathering Company, Spring Creek Compressor Station

Emission Unit ID	Description	<b>Control Equipment</b>	
	Three Caterpillar 3516LE Compressor Enginatural gas fired:	ines, 1,340 site rated hp,	Oxidation Catalyst
C-201	Serial No. 4EK04171 Installed 2/5/2	2005*	(GT Exhaust Systems, Inc.
C-202	Serial No. 4EK04112 Installed 2/5/2	2005*	Model No201 VO-4-250-
C-203	Serial No. 4EK04173 Installed 2/5/2	2005*	5112)
	Two Caterpillar 3516LE Compressor Engin natural gas fired:	nes, 1,340 site rated hp,	Oxidation Catalyst (not federally enforceable)
C-204	Serial No. TBD Installed TBD	*	
C-205	Serial No. TBD Installed TBD	*	

<sup>\*</sup> NSPS JJJJ and RICE MACT applicability determinations are included in Section 3.a. of this Statement of Basis

Part 71 allows sources to separately list in the permit application units or activities that qualify as "insignificant" based on potential emissions below 2 tons/year for all regulated pollutants that are not listed as hazardous air pollutants (HAPs) under section 112(b) and below 1000 lbs/year or the de minimis level established under section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement. Units that qualify as "insignificant" for the purposes of the part 71 application are in no way exempt from applicable requirements or any requirements of the part 71 permit.

Red Cedar stated in the part 71 permit application that the emission units in Table 2, below, are IEUs. The application provided emission calculations for the tanks using TANKS 4.0, for the glycol dehydrators using GRI-GLYCalc Version 3.0, and for the heaters using AP-42 emission factors. This supporting data justifies the source's claim that these units qualify as insignificant emission units (IEUs).

Table 2 - Insignificant Emission Units Red Cedar Gathering Company, Spring Creek Compressor Station

Emission Unit ID	Description
X-301	20 mmscfd/350,000 btu/hr natural gas fired dehydration reboiler
X-303	25 mmscfd/650,000 btu/hr natural gas fired dehydration reboiler
H-101, H-102, H-103	3 – catalytic heaters (Fuel Gas building – 18,000 btu/hr each)
TH-501, TH-502	1 waste water tank heater, and 1 waste oil tank heater (325,000 Btu/hr each)
H-101b, H-102b	2- catalytic heaters (inlet slug catchers – 8,000 btu/hr each)
TK-501	500 bbl waste water tank
TK-502	210 bbl waste oil tank
TK-505	500 Gallon TEG storage tank
TK-506	1,625 gallon lube oil storage tank
TK-503, TK-507	2 – 756 gallon glycol still vent tanks
TK-508, TK-509	2 – 500 gallon engine coolant tanks
TK-510	500 gallon TEG stock tank
TK-511, TK-512, TK-513	3 – 50 gallon engine coolant surge tanks

### e. Construction, permitting, and compliance history

The Spring Creek Compressor Station was initially constructed in February 2005, including installation of three Caterpillar G3516LE engines equipped with oxidation catalysts. Uncontrolled engine emissions from these units were evaluated, and it was determined that the facility was a minor source for criteria and hazardous air pollutants and therefore not subject to MACT standards or Part 71 permitting.

In December of 2005, two more Caterpillar G3516LE engines were added to the facility bringing the uncontrolled PTE of CO and CH<sub>2</sub>O above the major source thresholds. Due to the major source status of CO and CH<sub>2</sub>O, the facility became subject to part 71 permitting with an application due December 2006, one (1) year after the installation of the two additional engines. In addition, the first three engines (C-201, C-202, and C-203) would be subject to the requirements of the RICE MACT standard unless federally enforceable restrictions on engine HAP emissions were in place before the final compliance date for the RICE MACT (December 2008). The remaining two engines (C-204 and C-205) were manufactured in 1998 and relocated

to the Spring Creek Compressor Station as existing lean-burn compressor engines and thus were not subject to the RICE MACT upon start-up.

Upon submittal of its part 71 permit application, Red Cedar asked for federally enforceable limits for engines C-201, C-202, and C-203 to restrict CH<sub>2</sub>O emissions. The initial part 71 operating permit, #V-SU-0045-06.00, was issued on April 17, 2007 and was administratively amended on August 17, 2007 (#V-SU-0045-06.01).

As explained in Section 1.a. above, on December 12, 2007, Red Cedar requested that the part 71 operating permit be cancelled due to removal of units C-204 and C-205, but on August 13, 2008, rescinded their permit cancellation request, because Red Cedar intended to install replacement engines in place of units C-204 and C-205 via the off permit changes provision of the permit.

EPA conducted its first ever inspection at the Spring Creek Compressor Station on September 18, 2008. According to results from a test conducted in September 2008, the facility was in compliance with the permitted synthetic minor formaldehyde emission limits.

As explained in Section 1.a. above, on October 15, 2008, EPA received an application from Red Cedar proposing a significant modification to the Spring Creek Compressor Station, which included replacement of the voluntary CH<sub>2</sub>O emission limits on units C-201, C-202, and C-203 with the standard requirements under RICE MACT, as applicable. Based on the date the source became major for HAPs (upon installation of units C-204 and C-205 in December 2005), the required compliance date for units C-201, C-202, and C-203 was December 2008. The results of the September 2008 annual performance tests indicate that the engines achieved compliance prior to December 2008. Additionally, Red Cedar has replaced glycol dehydration unit X-302 with unit X-303, and is in the process of replacing removed units C-204 and C-205 with like-kind engines, under the off permit changes provisions of the currently active permit. Based on updated emission estimates, the dehydration units are now considered IEUs. The PTE for the replaced engines will remain reported as uncontrolled emissions, because Red Cedar is not requesting that the controls on units C-204 and C-205 be made federally enforceable.

Table 3 illustrates the change in potential emissions due to modifications that have occurred at this facility.

Table 3 – Construction, Permitting, and Compliance History Red Cedar Gathering Company, Spring Creek Compressor Station

February 2005 Initial Construction									
Unit	Description		Pote	ential to E	mit				
	•	NOx	CO	VOC	CH2O	Total			
		(tpy)	(tpy)	(tpy)	(tpy)	HAPs			
						(tpy)			
C-201	Caterpillar G3516 LE (new, uncontrolled)	19.41	24.46	3.88	3.23	4.47			
C-202	Caterpillar G3516 LE (new, uncontrolled)	19.41	24.46	3.88	3.23	4.47			
C-203	Caterpillar G3516 LE (new, uncontrolled)	19.41	24.46	3.88	3.23	4.47			
X-301	Glycol Dehydrator	0.18	0.15	2.14	0.001	0.02			
IEUs	Insignificant Units	0.75	0.63	0.75	0.005	0.08			
	February 2005 PTE Totals	59.16	74.16	14.53	9.69	13.51			
Minor s	ource for PSD and Title V permitting. Minor H	AP source.				,			
	ber 2005 Modification – Add 2 lean bur								
Unit	Description		Pote	ential to E	mit 🖊				
	-	NOx	CO	VOC	CH2O	Total			
		(tpy)	(tpy)	(tpy)	(tpy)	HAPs			
						(tpy)			
C-204	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.23	4.47			
C-205	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.23	4.47			
	Total Emissions Increase for Project	38.82	48.92	7.76	6.46	8.94			
Minor r	nodification of a minor PSD source.								
	December 2005 PTE Totals	97.98	123.08	22.29	16.15	22.45			
	PSD source. Major for Title V Permitting. Major proposed with the RICE MACT by December 2008 unless expedite.								
April 2	2007 – Title V Initial Permit - Control 3	Engines w	vith Fede	rally En	forceabl	e			
Restric	ctions Before RICE MACT Compliance	Date							
Unit	Description		Pote	ential to E	mit				
		NOx	CO	VOC	CH2O	Total			
		(tpy)	(tpy)	(tpy)	(tpy)	HAPs			
						(tpy)			
C-201	Caterpillar G3516 LE (new, controlled)	-0.0	-0.0	-0.0	-3.0	-3.0			
C-202	Caterpillar G3516 LE (new, controlled)	-0.0	-0.0	-0.0	-3.0	-3.0			
C-203	Caterpillar G3516 LE (new, controlled)	-0.0	-0.0	-0.0	-3.0	-3.0			
Total	Emissions Change for Enforceable Permit Action	-0.0	-0.0	-0.0	-6.0	-6.0			
	August 2007 PTE Totals	97.98	123.08	22.29	7.15	13.45			
Minor so	Minor source for PSD. Synthetic Minor HAP source. Major Title V source (Permit #V-SU-0045-06.00 Issued 4/17/07).								
August 17, 2007 - Administrative Amendment to Change Facility Contact Information									
No Change in Facility PTE (Permit #V-SU-0045-06.01)									

Table 3 – Construction, Permitting, and Compliance History (continued) Red Cedar Gathering Company, Spring Creek Compressor Station

2007 Summary of Potential Emissions										
Unit	Description	Potential to Emit								
		NOx (tpy)	CO (tpy)	VOC (tpy)	CH2O (tpy)	Total HAPs (tpy)				
C-201	Caterpillar G3516 LE (new, controlled)	19.41	24.46	3.88	0.23	1.46				
C-202	Caterpillar G3516 LE (new, controlled)	19.41	24.46	3.88	0.23	1.46				
C-203	Caterpillar G3516 LE (new, controlled)	19.41	24.46	3.88	0.23	1.46				
C-204	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.23	4.47				
C-205	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.23	4.47				
X-301	Glycol Dehydrator	0.18	0.15	2.14	0.001	0.02				
IEUs	Insignificant Units	0.75	0.63	0.75	0.005	0.08				
	2007 PTE Totals	98.0	123.1	22.3	7.2	13.5				

Minor source for PSD. Synthetic Minor HAP source. Major source for Title V (Permit #V-SU-0045-06.00).

### January 18, 2008 – NSPS for SI ICE and Amendments to RICE MACT Promulgated

### Affected Sources:

- As per 2004 RICE MACT promulgation for >500 bhp at major sources (unchanged by the amendments)
- New/reconstructed SI ICE at area HAP sources that commenced construction, modification, or reconstruction after 6/12/2006 (SI ICE NSPS)
- Existing RICE < 500 bhp, located at major sources of HAP emissions, constructed or reconstructed before 6/12/2006</li>
- New/Reconstructed RICE < 500 bhp, located at major sources of HAP emissions, constructed or reconstructed on or after 6/12/2006</li>
   Final Compliance Dates
  - As above for 2004 RICE NESHAP Promulgation for >500 bhp at major sources
  - $\bullet \qquad \text{Existing lean burn RICE at minor HAP source or} \leq 500 \text{ bhp at major source No requirements}$
  - Existing rich burn RICE at minor HAP source or ≤ 500 bhp at major source No requirements
  - New/Reconstructed RICE at minor HAP source or ≤ 500 bhp at major HAP source started up before January 18, 2008 →
    January 18, 2008
- New/Reconstructed RICE at minor HAP source or  $\leq$  500 bhp at major source started up after January 18, 2008  $\rightarrow$  upon startup Applicability to Spring Creek Compressor Station

C-201, C-202, and C-203 were not subject to area source requirements because they commenced construction prior to June 12, 2006.

# September 18, 2008 – First Ever EPA Inspection of Facility

No Change in Facility PTE

Table 3 – Construction, Permitting, and Compliance History (continued) Red Cedar Gathering Company, Spring Creek Compressor Station

January 2009 – Proposed Significant Permit Modification – Remove voluntary synthetic minor CH2O limits and replace with RICE MACT requirements; Replace dehydration unit X-302 with X-303 and move units X-301 and X-303 to IEU list, based on updated emissions estimates.

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Unit	Description	Potential to Emit						
		NOx	CO (tpy)	VOC	CH2O	Total		
		(tpy)		(tpy)	(tpy)	HAPs		
					(controlled)*	(tpy)		
						(controlled)*		
C-201	Caterpillar G3516 LE (new, uncontrolled*)	33.57**	24.46	3.88	3.34	4.52		
		33.37	27.70	3.00	(0.23)*	(2.42)*		
C-202	Caterpillar G3516 LE (new, uncontrolled*)	58.21**	24.46	3.88	3.34	4.52		
		36.21	24.40	5.00	(0.23)*	(2.42)*		
C-203	Caterpillar G3516 LE (new, uncontrolled*)	25.10**	24.46	3.88	3.34	4.52		
		23.10	24.40	5.00	(0.23)*	(2.42)*		
C-204	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.34	4.52		
C-205	Caterpillar G3516 LE (existing, uncontrolled)	19.41	24.46	3.88	3.34	4.52		
IEUs	Insignificant Units	0.86	0.72	0.78	0.01	0.10		
Tot	al Emissions Change for Proposed Permit Action	+58.6	-0.1	-2.1	+9.5	+9.2		
	2007 PTE Totals	156.6	123.0	20.2	16.7	22.7		
		150.0	123.0	20.2	(7.4)*	(16.4)*		

Minor source for PSD. Major HAP source. Major source for Title V (Proposed Permit #V-SU-0045-06.02).

### f. Potential to emit

Under 40 CFR 52.21, PTE is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design <u>if</u> the limitation, or the effect it would have on emissions, is federally enforceable.

National EPA guidance on PTE states that air pollution control equipment (in this case oxidation catalyst devices) can be credited as restricting PTE only if federally enforceable requirements are in place requiring the use of such air pollution control equipment. The primary applicable guidance is a memo titled "Guidance on Limiting Potential to Emit in New Source Permitting," dated June 13, 1989, to EPA Regional Offices, from the Office of Enforcement and Compliance Assurance (OECA), and the Office of Air Quality Planning and Standards (OAQPS). A later memo to the EPA Regional Offices, dated January 25, 1995, titled "Guidance

<sup>\*</sup>Because Red Cedar demonstrated compliance with both the current permitted emissions limits (currently enforceable) AND the RICE MACT requirements for major sources, according to its recent September 2008 test results, they will be able to take credit for the reductions in CH<sub>2</sub>O emissions when evaluating future modifications of the facility.

<sup>\*\*</sup>September 2008 post-catalyst testing of engines C-201, C-203, and C-204 yielded results for NOx emissions that exceeded the manufacturer's estimated uncontrolled PTE that Red Cedar reported in the significant modification application. Actual test results are more accurate than manufacturer emission factors and oxidation catalysts are not designed to control NOx; therefore, the EPA has reported the results from that test as the PTE for NOx.

on Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits," also provides guidance on this topic.

The initial permit for the Spring Creek Compressor Station contained an hourly emission limit as a component of the restriction on PTE for engines C-201, C-202, and C-203, along with certain related operational and work practice restrictions and monitoring and testing requirements to ensure compliance with the limitations. These limitations allowed the source to be considered a synthetic minor source with respect to HAP emissions, and avoid applicability to the RICE MACT requirements for major sources for those engines.

Red Cedar in its significant modification application reported the PTE for NOx emissions from engine units C-201, C-202, and C-203 using the manufacturer's emission factors. Results from the September 2008 testing of these engines showed NOx emissions significantly higher than the reported PTE in the application. PTE is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design; therefore, EPA must consider the September 2008 test results as the NOx PTE for each of the three engines.

The results of the proposed significant permit modifications, and the September 2008 performance test results for NOx emissions, are an increase in the facility's PTE of NOx and HAP emissions. The proposed removal of the CH<sub>2</sub>O limits and other associated requirements will result in total facility-wide CH<sub>2</sub>O emissions that exceed the major emissions threshold for a single HAP, and will move the facility from a synthetic minor source of HAP emissions to a major source of HAP emissions. As a major source of HAP emissions, engine units C-201, C-202, and C-203 will become subject to the RICE MACT requirements for major sources. Because the engines were installed in 2005, the RICE MACT requires the engines to have been in compliance by December 2008. Red Cedar has already demonstrated through the results of the September 2008 testing that all three emission units are in compliance with the current permitted emission limits, as well as the RICE MACT requirements. Because the facility has demonstrated compliance with the RICE MACT requirements, they will be able to take credit for the reduction of CH<sub>2</sub>O emissions from the use of the oxidation catalysts for evaluation of future modifications of the facility.

The PTE for the Spring Creek Compressor Station was listed by Red Cedar in Form "GIS" of the part 71 operating permit significant modification application. As explained previously, EPA is substituting the manufacturer's estimated uncontrolled PTE for NOx from units C-201, C-202, and C-203 with the NOx results from the September 2008 test. Table 4 shows PTE data for the proposed significant modification at Spring Creek Compressor Station, both uncontrolled and controlled (emission controls taken into consideration). EPA has also included the PTE for insignificant emissions (based on supporting application information provided by Red Cedar) in the total facility-wide PTE, which are:

Table 4 - Potential to Emit
Red Cedar Gathering Company, Spring Creek Compressor Station

Emission Unit ID	Regulated Air Pollutants in tpy (controlled)								
	NO <sub>X</sub>	VOC	$SO_2$	$PM_{10}$	СО	Lead	НАР	CH <sub>2</sub> O	
C-201	33.57	3.88	-	-	24.46		4.52 (2.42)	3.34 (0.23)	
C-202	58.21	3.88	-	-	24.46	-	4.52 (2.42)	3.34 (0.23)	
C-203	25.18	3.88	-	-	24.46	-	4.52 (2.42)	3.34 (0.23)	
C-204	19.41	3.88	-	-	24.46	-	4.52	3.34	
C-205	19.41	3.88	-	-	24.46	-	4.52	3.34	
IEUs	0.86	0.78	-	-	0.72	-	0.10	-	
TOTAL	156.6	20.2	-	-	123.0		22.7 (16.4)	16.7 (7.37)	

### 3. Tribe Information - Southern Ute Tribe

### a. <u>Indian country</u>

Red Cedar's Spring Creek Compressor Station is located within the exterior boundaries of the Southern Ute Indian Reservation and is thus within Indian country as defined at 18 U.S.C. §1151. The Southern Ute Tribe does not have a federally-approved CAA title V operating permits program nor does EPA's approval of the State of Colorado's title V program extend to Indian country. Thus, EPA is the appropriate governmental entity to issue the title V permit to this facility.

### b. The reservation

The Southern Ute Indian Reservation is located in southwestern Colorado adjacent to the New Mexico boundary. Ignacio is the headquarters of the Southern Ute Tribe, and Durango is the closest major city, just 5 miles outside of the north boundary of the Reservation. Current information indicates that the population of the Tribe is about 1,305 people with approximately 410 tribal members living off the Reservation. In addition to Tribal members, there are over 30,000 non-Indians living within the exterior boundaries of the Southern Ute Reservation.

### c. <u>Tribal government</u>

The Southern Ute Indian Tribe is governed by the Constitution of the Southern Ute Indian Tribe of the Southern Ute Indian Reservation, Colorado adopted on November 4, 1936 and subsequently amended and approved on October 1, 1975. The Southern Ute Indian Tribe is a federally recognized Tribe pursuant to Section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat.984), as amended by the Act of June 15, 1935 (49 Stat. 378). The governing body of the Southern Ute Indian Tribe is a seven member Tribal Council, with its members elected from the general membership of the Tribe through a yearly election process. Terms of the Tribal Council are three (3) years and are staggered so in any given year 2 members are up for reelection. The Tribal Council officers consist of a Chairman, Vice-Chairman and Treasurer.

# d. Local air quality and attainment status

The Tribe maintains an air monitoring network consisting of two stations equipped to measure ambient concentrations of oxides of nitrogen (NO, NO<sub>2</sub>, and NO<sub>x</sub>), ozone (O<sub>3</sub>), and carbon monoxide (CO), and to collect meteorological data. The Tribe has collected NO<sub>2</sub> and O<sub>3</sub> data at the Ignacio, Colorado station (also known as the Ute 1 station, with AQS identification number 08-067-7001) and the Bondad, Colorado station (also known as Ute 3, with AQS identification number 08-067-7003) since June 1, 1982, and April 1, 1997, respectively. The CO channel at the Ignacio station has been reporting to AQS since January 1, 2000, and both stations began reporting NO and NO<sub>x</sub> data to AQS on the same day. Also in 2000, both stations initiated meteorological monitors measuring wind speed, wind direction, vertical wind speed, outdoor temperature, relative humidity, solar radiation, and rain/snowmelt precipitation. Reporting of vertical wind speed data from both stations terminated on July 1, 2007. Particulate data (PM<sub>10</sub>) was collected from December 1, 1981 to September 30, 2006 at the Ignacio station and from April 1, 1997 to September 30, 2006 at the Bondad station. The Tribe reports hourly data to AOS for the criteria pollutants being monitored (NO<sub>2</sub>, O<sub>3</sub>, and CO), allowing AQS users to retrieve data that can be compared to any of the National Ambient Air Quality Standards for these pollutants.

# 4. Analysis of Applicable Requirements

# a. The following federal requirements have been reviewed for applicability

The following discussions address applicable requirements, and requirements that may appear to be applicable but are not. All applicable and non-applicable requirements addressed here are included in the Code of Federal Regulations at title 40.

### **Prevention of Significant Deterioration (PSD)**

New major stationary sources of air pollution or significant modifications to existing major stationary sources are required by the CAA to obtain an air pollution permit before commencing construction. A major stationary source is any source type belonging to a list of 28 source categories which emits or has the potential to emit 100 tpy or more of any pollutant regulated under the CAA or any other source type which emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tpy.

The Spring Creek Compressor Station does not belong to any of the 28 source categories. Therefore, the potential to emit threshold for determining PSD applicability for this newly constructed source is 250 tpy. A review of the Spring Creek Compressor Station application indicates that the potential emission increases of any pollutant regulated under the CAA (not including pollutants listed under section 112) associated with the construction of the Spring Creek Compressor Station in February 2005 and December 2005 were below the major source levels, therefore, this facility was not required to obtain a PSD permit and at this time remains a true minor source with respect to the PSD regulations.

# **New Source Performance Standards (NSPS)**

40 CFR Part 60, Subpart A: General Provisions. This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of any standard in part 60. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 60.

As explained below, the Spring Creek Compressor Station is not subject to any specific subparts of part 60, therefore the General Provisions of part 60 do not apply.

40 CFR Part 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

There are no steam generating units with a maximum design heat input capacity greater than or equal to 10 MMBtu/hr at the facility; therefore, the Spring Creek Compressor Station is not subject to subpart Dc.

40 CFR Part 60, Subpart K: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. 40 CFR part 60, subpart K does not apply to

storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

The subpart does not apply to the storage vessels at the Spring Creek Compressor Station because there are no tanks at this site that were constructed, reconstructed, or modified after June 11, 1973, and prior to May 19, 1978.

40 CFR Part 60, Subpart Ka: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to June 23, 1984. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart Ka does not apply to petroleum storage vessels with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

The subpart does not apply to the storage vessels at the Spring Compressor Station because there are no tanks at this site that were constructed, reconstructed, or modified after May 18, 1978, and prior to June 23, 1984.

40 CFR Part 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule applies to storage vessels with a capacity greater than or equal to 75 cubic meters (~19,813 gallons).

Although all storage tanks at the facility were constructed after July 23, 1984, the only tank that has a capacity greater than 75 cubic meters (TK-501, ~79.5 cubic meters) stores waste water and trace amounts of condensate (as defined under the subpart) that are mechanically removed from the gas stream. The subpart specifically exempts vessels with a design capacity less than or equal to 1,589.874 cubic meters that store condensate prior to custody transfer (as defined under the subpart), per 40 CFR 60.110b(d)(4); therefore the Spring Creek Compressor Station is not subject to subpart Kb.

40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. This rule applies to stationary gas turbines, with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hr), that commenced construction, modification, or reconstruction after October 3, 1977.

There are no stationary gas turbines located at the Spring Creek Compressor Station; therefore, this rule does not apply.

40 CFR Part 60, Subpart KKK: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This rule applies to compressors and other equipment at onshore natural gas processing facilities. As defined in this subpart, a natural gas

processing plant is any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids (NGLs) to natural gas products, or both. Natural gas liquids are defined as the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

The Spring Creek Compressor Station does not extract NGLs from field gas, nor does it fractionate mixed NGLs to natural gas products, and thus does not meet the definition of a natural gas processing plant under this subpart. Therefore, this rule does not apply.

40 CFR Part 60, Subpart LLL: Standards of Performance for Onshore Natural Gas Processing; SO<sub>2</sub> Emissions. This rule applies to sweetening units and sulfur recovery units at onshore natural gas processing facilities. As defined in this subpart, sweetening units are process devices that separate hydrogen sulfide (H<sub>2</sub>S) and carbon dioxide (CO<sub>2</sub>) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H<sub>2</sub>S and CO<sub>2</sub>) removed by a sweetening unit.

There are no sweetening or sulfur recovery units at the Spring Creek Compressor Station; therefore, this rule does not apply.

40 CFR Part 60, Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

Red Cedar provided the following information:

Table 5 –NSPS Subpart JJJJ Applicability Red Cedar Spring Creek Compressor Station

Unit	Serial Number	Unit Description	Fuel	ВНР	Commenced Construction Date / Manufacture Date	Start-up Date	Subpart JJJJ Trigger Date – Manufactured
C-201	4EK04171	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Prior to 6/12/06 / Prior to 1/1/2008	2/5/2005	on or after 1/1/2008
C-202	4EK04172	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Prior to 6/12/06 / Prior to 1/1/2008	2/5/2005	1/1/2008
C-203	4EK04173	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Prior to 6/12/06 / Prior to 1/1/2008	2/5/2005	1/1/2008
C-204	TBD	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	TBD	TBD	1/1/2008
C-205	TBD	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	TBD	TBD	1/1/2008

According to the information provided by Red Cedar in the October 2008 application, none of the engines currently operating at the facility were constructed, modified, or reconstructed after the trigger date of June 12, 2006 or were manufactured on or after the manufacture trigger date of January 1, 2008; therefore, the requirements in subpart JJJJ do not currently apply to engines C-201, C-202, or C-203 at Spring Creek Compressor Station. Red Cedar has not yet replaced engines C-204 and C-205, which have been removed, but has asked that they be kept in the permit as a placeholder in order to allow for the future use of the off permit changes provisions of the permit to install engines of the same make, model, bhp, fuel, and usage, and which do not trigger NSPS subpart JJJJ. Should Red Cedar install replacement engines for C-204 and C-205 that are subject to subpart JJJJ, Red Cedar will not be allowed to use the off permit changes provisions, and will be required to submit a permit modification application to incorporate subpart JJJJ requirements into the permit. Red Cedar has proposed that the units will be in compliance with subpart JJJJ upon startup, should they be subject to subpart JJJJ.

### National Emissions Standards for Hazardous Air Pollutants (NESHAP)

40 CFR Part 63, Subpart A: General Provisions. This subpart contains national emissions standards for HAPs that regulate specific categories of sources that emit one or more HAP regulated pollutants under the Clean Air Act. The general provisions under subpart A apply to sources that are subject the specific subparts of part 63.

As explained below, the Spring Creek Compressor Station is subject to 40 CFR 63, subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; therefore, the General Provisions of part 63 apply.

40 CFR Part 63, Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to the owners and operators of affected units located at natural gas production facilities that are major sources of HAPs, and that process, upgrade, or store natural gas prior to the point of custody transfer, or that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. The affected units are glycol dehydration units, storage vessels with the potential for flash emissions, and the group of ancillary equipment, and compressors intended to operate in volatile hazardous air pollutant service, which are located at natural gas processing plants.

### Throughput Exemption

Those sources whose maximum natural gas throughput, as appropriately calculated in §63.760(a)(1)(i) through (a)(1)(iii), is less than 18,400 standard cubic meters per day are exempt from the requirements of this subpart.

### Source Aggregation

Major source, as used in this subpart, has the same meaning as in §63.2, except that:

- 1) Emissions from any oil and gas production well with its associated equipment and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units.
- 2) Emissions from processes, operations, or equipment that are not part of the same facility shall not be aggregated.
- 3) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage tanks with flash emission potential shall be aggregated for a major source determination.

# **Facility**

For the purpose of a major source determination, facility means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in subpart HH. Examples of facilities in the oil and natural gas production category include, but are not limited to: well sites, satellite tank batteries, central tank batteries, a

compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

### Production Field Facility

Production field facilities are those located prior to the point of custody transfer. The definition of custody transfer (40 CFR 63.761) means the point of transfer after the processing/treating in the producing operation, except for the case of a natural gas processing plant, in which case the point of custody transfer is the inlet to the plant.

### Natural Gas Processing Plant

A natural gas processing plant is defined in 40 CFR 63.761 as any processing site engaged in the extraction of NGLs from field gas, or the fractionation of mixed NGLs to natural gas products, or a combination of both. A treating plant or gas plant that does not engage in these activities is considered to be a production field facility.

### Major Source Determination for Production Field Facilities

The definition of major source in this subpart (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels with a potential for flash emissions at production field facilities are to be aggregated when comparing to the major source thresholds. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated.

# Area Source Applicability

40 CFR part 63, subpart HH also applies to area sources of HAPs. An area source is a HAP source whose total HAP emissions are less than 10 tpy of any single HAP or 25 tpy for all HAPs in aggregate. This subpart requires different emission reduction requirements for glycol dehydration units found at oil and gas production facilities based on their geographical location. Units located in densely populated areas (determined by the Bureau of Census) and known as urbanized areas with an added 2-mile offset and urban clusters of 10,000 people or more, are required to have emission controls. Units located outside these areas will be required to have the glycol recirculation pump rate optimized or operators can document that PTE of benzene is less than 1 tpy.

### Applicability of Subpart HH to the Spring Creek Compressor Station

The Spring Creek Compressor Station is a production field facility prior to the point of custody transfer. For production field facilities, only emissions from the dehydration units and storage vessels with a potential for flash emissions are to be aggregated to determine major

source status. The facility has glycol dehydrators but no storage vessels with the potential for flash emissions and the HAP emissions from the dehydration units alone at the facility are below the major source thresholds of 10 tpy of a single HAP and 25 tpy of aggregated HAPs. Therefore, the Spring Creek Compressor Station is an area source of HAP emissions.

With respect to the area source requirements of this subpart, the facility is located outside both an urban area and an urban cluster. Furthermore, uncontrolled benzene emissions from the two TEG glycol dehydrator units at the facility have been determined to be less than 1 tpy using GRI-GLYCalc Version 4.0, as presented in the supporting documentation in the application. As a result, the dehydration units (X-301 and X-303) at the facility are exempt from the §63.764(d) general requirements for area sources. However, the following general recordkeeping requirement will continue to apply to this facility:

 §63.774(d)(1) – retain the GRI-GLYCalc determinations used to demonstrate that actual average benzene emissions are below 1 tpy.

Should uncontrolled emissions of benzene from the dehydrators ever exceed 1 tpy, then the facility will become subject to the requirements for area sources.

40 CFR Part 63, Subpart HHH: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This rule applies to natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user, and that are a major source of HAP emissions. A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage source category.

This subpart does not apply to the Spring Creek Compressor Station as the facility is a natural gas production facility and not a natural gas transmission or storage facility.

40 CFR Part 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for HAP emissions emitted from stationary RICE.

This rule applies to owners or operators of new and reconstructed stationary RICE of any horsepower rating that are located at a <u>major or area</u> source of HAP emissions. While all new or reconstructed stationary RICE located at major or area sources are subject to the final rule (promulgated January 18, 2008, amending the final rule promulgated June 15, 2004), there are distinct requirements for regulated stationary RICE depending on their design, use, horsepower rating, fuel, and major or area HAP emission status.

## Major Source Applicability

The standard now applies to engines with a horsepower rating of less than or equal to 500 bhp in addition to those engines with a horsepower rating greater than 500 bhp. The standard continues to have specific requirements for new or reconstructed RICE and for existing SI 4 stroke rich burn (4SRB) stationary RICE located at a major HAP facility.

With the exception of the existing spark ignition 4SRB stationary RICE, other types of existing stationary RICE (i.e., spark ignition 2 stroke lean burn (2SLB), spark ignition 4SLB, compression ignition (CI), stationary RICE that combust landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, emergency, and limited use units) located at a major source of HAP emissions are not subject to any specific requirement under the final rule.

**Existing RICE:** A stationary RICE with a site rating of greater than 500 bhp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 bhp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before June 12, 2006.

**New RICE:** A stationary RICE with a site rating of greater than 500 bhp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 bhp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

## Area (minor) Source Applicability

The standard now has specific requirements for new and reconstructed stationary RICE located at minor sources of HAP emissions, for engines of all horsepower ratings. The area source standards for new stationary RICE reference the requirements of NSPS JJJJ for Spark Ignition Internal Combustion Engines and/or NSPS IIII for Compression Ignition Internal Combustion Engines. Existing RICE located at an area HAP source are not subject to any specific requirement under the final rule.

**Existing RICE:** A stationary RICE is existing at an area source of HAP emissions if construction or reconstruction of the unit commenced before June 12, 2006. The area source standards do not apply to existing stationary RICE.

**New RICE:** A stationary RICE is new at an area source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

Red Cedar provided the following information:

**Table 6- NESHAP Subpart ZZZZ Applicability** 

Unit	Serial Number	Unit Description	Fuel	ВНР	Commenced Construction, Reconstruction, or Modification Date	Installation Date
C-201	4EK04171	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Post 12/19/2002	2/5/2005
C-202	4EK04172	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Post 12/19/2002	2/5/2005
C-203	4EK04173	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	Post 12/19/2002	2/5/2005
C-204	TBD	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	TBD	TBD
C-205	TBD	Caterpillar G3516LE / 4SLB	Natural Gas	1,350	TBD	TBD

The Spring Creek Compressor Station will become a major source of HAP emissions upon final issuance of this permit modification. According to the information provided by Red Cedar in the October 2008, significant modification application, units C-201, C-202, and C-203 will become subject to the requirements of the subpart for major sources, because the engines are new 4SLB engines greater than 500 bhp. Recent testing results have shown that the units were in compliance with the requirements by the December 2008 compliance date mandated in the rule.

Red Cedar has removed units C-204 and C-205, but has asked that they be kept in the permit as a placeholder in order to allow for the future use of the off permit changes provision of the permit to install engines of the same make, model, bhp, fuel, and usage, and which do not trigger NESHAP subpart ZZZZ or NSPS subpart JJJJ. Red Cedar has proposed that applicability for units C-204 and C-205 will be determined prior to installation of the replacement units. Red Cedar has also proposed that should these units be subject to the requirements of this subpart or NSPS subpart JJJJ, they will be in compliance with this subpart upon startup, as applicable. Red Cedar will not be allowed to use the off permit changes provision, and will be required to submit a permit modification application, to include unit C-204 and C-205, as applicable, as additional units subject to the subpart ZZZZ requirements being added as part of this draft permit action, or to incorporate subpart JJJJ requirements into the permit, respectively.

# **Compliance Assurance Monitoring (CAM) Rule**

40 CFR part 64: Compliance Assurance Monitoring. The CAM rule applies to each Pollutant Specific Emission Unit (PSEU) that meets a three-part test. The PSEU must be:

1) subject to an emission limitation or standard, 2) use an add-on control device to achieve compliance, and 3) have pre-control emissions that exceed or are equivalent to the title V, 100 tpy major source threshold.

The Spring Creek Compressor Station is not subject to CAM requirements, because no PSEUs at the facility have pre-control emissions that equal or exceed 100 tpy.

### **Chemical Accident Prevention Program**

40 CFR Part 68: Chemical Accident Prevention Provisions. Based on Red Cedar's application, the Spring Creek Compressor Station currently has no regulated substances above the threshold quantities in this rule and therefore is not subject to the requirement to develop and submit a risk management plan. However, Red Cedar has an ongoing responsibility to submit this plan IF a substance is listed that the total source has in quantities over the threshold amount or IF the total source ever increases the amount of any regulated substance above the threshold quantity.

### **Stratospheric Ozone and Climate Protection**

40 CFR Part 82, Subpart F: Air Conditioning Units. Based on information supplied by the applicant, Red Cedar does not currently operate air conditioning units at the Spring Creek Compressor Station. However, should Red Cedar perform any maintenance, service, repair, or disposal of any equipment containing chlorofluorocarbons (CFCs), or contracts with someone to do this work, Red Cedar would be required to comply with title VI of the CAA and submit an application for a modification to this title V permit.

40 CFR Part 82, Subpart H: Halon Fire Extinguishers. Based on information supplied by the applicant, there are no halon fire extinguishers at the Spring Creek Compressor Station. However, should Red Cedar obtain any halon fire extinguishers, then it must comply with the standards of 40 CFR part 82, subpart H for halon emissions reduction, if it services, maintains, tests, repairs, or disposes of equipment that contains halons or uses such equipment during technician training. Specifically, Red Cedar would be required to comply with 40 CFR part 82 and submit an application for a modification to this title V permit.

### **Off Permit Changes and Alternative Operating Scenarios**

In response to an earlier Red Cedar application request, language was included in the permit to allow for off permit replacement of individual compressor engines with new or overhauled engines, provided that each replacement engine is the same make, model, horsepower rating, configuration, and with equivalent air emission controls and meeting the same applicable requirements, as the engine it replaces, and provided that the provisions in the Off Permit Changes section of the permit, specific to engine replacement, are satisfied. The primary purpose of the special provisions is to ensure the PSD, NSPS, and MACT permitting requirements are not circumvented by off permit changes. Related language is also included in the section on Alternative Operating Scenarios.

### **Periodic Monitoring**

The Appalachian Power court decision held that 40 CFR 71.6(a)(3)(i) authorizes a sufficiency review of monitoring and testing in an existing emissions standard, and enhancement of that monitoring or testing through the permit, when the standard requires no periodic testing or instrumental or non-instrumental monitoring, specifies no frequency, or requires only a one-time test. Thus, EPA has authority in the federal operating permit regulation to specify additional testing or monitoring for a source to assure compliance, when existing applicable regulations do not require periodic monitoring or only require a one-time emissions test.

Because 40 CFR part 63, subpart ZZZZ requires continuous emissions monitoring and frequent testing of the subject engines, EPA determined that enhancement of the monitoring and testing was not necessary.

## b. Conclusion

Since the Spring Creek Compressor Station is located in Indian country, the State of Colorado's implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Southern Ute Tribe, and EPA has not promulgated a federal implementation plan (FIP) for the area of jurisdiction governing the Southern Ute Indian Reservation. Therefore, the Spring Creek Compressor Station is not subject to any implementation plan.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Regional Offices will, as necessary and appropriate, promulgate FIPs that will establish federal requirements for sources in specific areas. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop TIPs for approval under the Tribal Authority Rule. EPA intends that its federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

## **5. EPA Authority**

### a. General authority to issue part 71 permits

Title V of the CAA requires that EPA promulgate, administer, and enforce a federal operating permits program when a state does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or tribal agency has not developed an approved part 70 program. Unlike states, Indian tribes are not required to develop operating permits programs, though EPA encourages tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until a tribe receives approval to administer their own operating permits programs.

### 6. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

### 7. Public Participation

### a. Public notice

As described in 40 CFR 71.11(a)(5), all part 71 draft operating permits shall be publicly noticed and made available for public comment. The public notice of permit actions and public comment period is described in 40 CFR 71(d).

Public notice is given for the draft permit by mailing a copy of the notice to the permit applicant, the affected state, tribal and local air pollution control agencies, the city and county executives, the state and federal land managers and the local emergency planning authorities that have jurisdiction over the area where the source is located. A copy of the notice is provided to all persons who submitted a written request to be included on the mailing list. If you would like to be added to our mailing list to be informed of future actions on these or other CAA permits issued in Indian country, please send your name and address to the contact listed below:

# Claudia Smith, Part 71 Permit Contact U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

Public notice will be published in the <u>Durango Herald</u> as detailed in the cover letter of this draft permit package, giving opportunity for public comment on the draft permit and the opportunity to request a public hearing.

# b. Opportunity for comment

Members of the public will be given an opportunity to review a copy of the draft permit prepared by EPA, the application, this statement of basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents are available at:

La Plata County Clerk's Office 1060 East 2<sup>nd</sup> Avenue Durango, Colorado 81302

and

Southern Ute Indian Tribe Environmental Programs Office 116 Mouache Drive Ignacio, Colorado 81137

and

US EPA Region 8 Air Program Office 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

All documents are available for review at the U.S. EPA Region 8 office Monday through Friday from 8:00 a.m. to 4:00 p.m. (excluding Federal holidays).

Any interested person may submit written comments on the draft part 71 operating permit during the public comment period to the Part 71 Permit Contact at the address listed above. All comments will be considered and answered by EPA in making the final decision on the permit. EPA keeps a record of the commenters and of the issues raised during the public participation process.

Anyone, including the applicant, who believes any condition of the draft permit is inappropriate should raise all reasonable ascertainable issues and submit all arguments

supporting their position by the close of the public comment period. Any supporting materials submitted must be included in full and may not be incorporated by reference, unless the material has already been submitted as part of the administrative record in the same proceeding or consists of state or Federal statutes and regulations, EPA documents of general applicability, or other generally available reference material.

## c. Opportunity to request a hearing

A person may submit a written request for a public hearing to the Part 71 Permit Contact, at the address listed above, by stating the nature of the issues to be raised at the public hearing. Based on the number of hearing requests received, EPA will hold a public hearing whenever it finds there is a significant degree of public interest in a draft operating permit. EPA will provide public notice of the public hearing. If a public hearing is held, any person may submit oral or written statements and data concerning the draft permit.

## d. Appeal of permits

Within 30 days after the issuance of a final permit decision, any person who filed comments on the draft permit or participated in the public hearing may petition to the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or participate in the public hearing may petition for administrative review, only if the changes from the draft to the final permit decision or other new grounds were not reasonably foreseeable during the public comment period. The 30 day period to appeal a permit begins with EPA's service of the notice of the final permit decision.

The petition to appeal a permit must include a statement of the reasons supporting the review, a demonstration that any issues were raised during the public comment period, a demonstration that it was impracticable to raise the objections within the public comment period, or that the grounds for such objections arose after such a period. When appropriate, the petition may include a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous; or, an exercise of discretion, or an important policy consideration that the Environmental Appeals Board should review.

The Environmental Appeals Board will issue an order either granting or denying the petition for review, within a reasonable time following the filing of the petition. Public notice of the grant of review will establish a briefing schedule for the appeal and state that any interested person may file an amicus brief. Notice of denial of review will be sent only to the permit applicant and to the person requesting the review. To the extent review is denied, the conditions of the final permit decision become final agency action.

A motion to reconsider a final order shall be filed within 10 days after the service of the final order. Every motion must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for reconsideration shall be directed to the

Administrator rather than the Environmental Appeals Board. A motion for reconsideration shall not stay the effective date of the final order unless it is specifically ordered by the Board.

## e. <u>Petition to reopen a permit for cause</u>

Any interested person may petition EPA to reopen a permit for cause, and EPA may commence a permit reopening on its own initiative. EPA will only revise, revoke and reissue, or terminate a permit for the reasons specified in 40 CFR 71.7(f) or 71.6(a)(6)(i). All requests must be in writing and must contain facts or reasons supporting the request. If EPA decides the request is not justified, it will send the requester a brief written response giving a reason for the decision. Denial of these requests is not subject to public notice, comment, or hearings. Denials can be informally appealed to the Environmental Appeals Board by a letter briefly setting forth the relevant facts.

## f. Notice to affected states/tribes

As described in 40 CFR 71.11(d)(3)(i), public notice will be given by mailing a copy of the notice to the air pollution control agencies of affected states, tribal and local air pollution control agencies that have jurisdiction over the area in which the source is located, the chief executives of the city and county where the source is located, any comprehensive regional land use planning agency and any state or Federal land manager whose lands may be affected by emissions from the source. The following entities will be notified:

- State of Colorado, Department of Public Health and Environment
- State of New Mexico, Environment Department
- Southern Ute Indian Tribe, Environmental Programs Office
- Ute Mountain Ute Tribe, Environmental Programs
- Navajo Tribe, Navajo Nation EPA
- Jicarilla Tribe, Environmental Protection Office
- La Plata County, County Clerk
- Town of Ignacio, Mayor
- National Park Service, Air, Denver, CO
- U.S. Department of Agriculture, Forest Service, Rocky Mountain Region
- Carl Weston
- San Juan Citizen Alliance
- Wild Earth Guardians (formerly Rocky Mountain Clean Air Action)